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MEMORANDUM

TO: W. W. Haythorn, N. Jordan, W. A. Steger

DATE: 3-2-61

FROM: Daniel Ellsberg

MEMO NO.: M-1503

SUBJECT: D-8236, "ADDITIONAL THOUGHTS ON COMMAND AND CONTROL RESEARCH

COPIES TO:

1. D-8236 seems to me to be a very useful addition to the growing RAND literature on general problems of command and control. I am particularly struck by the lack of overlap between your Section II, "Questions Regarding Command and Control Systems," and other extensive discussions of command and control problems, such as my D-7838; this is an indication of the breadth and richness of this subject and the need for contributions from many disciplines.

2. I have two small comments to make. I believe that the dangers of "Type I errors," accidents and unauthorized actions, are dismissed much too casually (p. 26). I suspect that the combination of a tense situation, a false alarm, and an unauthorized action, is neither unlikely (enough) nor insufficient to generate a war. Secondly, I would say that there is insufficient attention in your Document to the problem of the goals and requirements of a command and control system (see, for example, p. 46). The theme of D-7838, which I believe strongly, is that the demands made upon command and control systems are very sensitive to the choice of goals and strategies. This is less true once one restricts oneself to a set of strategies requiring continuing centralized post-attack control of operations, but it is unlikely that the "customers" of your simulation work would at present so restrict themselves. A simulation which accepted the current views of the "customers" as to strategy, objectives, and requirements, would allow little play for post-attack control. At the least, alternatives to a "spasm war" would have to be explored by the simulation.

3. I have little feel for the cost-effectiveness aspects of a simulation approach, but your discussion is persuasive. I notice that you make little mention of the possibility of training high-level military commanders in the sort of "decision-making exercises" which SDC has been considering. It might be a useful approach to consider developing a simulation technique which would be suitable for this purpose.

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